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THE ACTIVITY OF WILD AMERICAN DIGITALIS.

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States Public Health Service.

The necessity for the utilization of every available source in the collection of crude material for the preparation of botanic drugs has perhaps never been so urgent as at the present time. For obvious reasons the price of crude drugs has advanced greatly within the past few years, among these drugs being digitalis. Under normal conditions the greater part of the supply of digitalis came from Germany and Austria, and since these sources of supply have been removed the available stock has been greatly diminished. At the outbreak of the European war, when a shortage in the supply of crude botanic drugs was first felt, many original articles and editorials appeared in the various drug and pharmaceutical journals for the purpose of awakening an interest in drug-plant culture, suggesting this means as a remedy for the shortage. Although interest in the growing of drug plants is increasing constantly, there are so many difficulties in the way of their successful production on a commercial scale that the cultivation of digitalis for example has not been extensive enough to fill the present need. The maximum quotation on ordinary digitalis leaves, as given in the Druggists Circular for November, 1913, was 30 cents per pound, while for Allen's powdered leaves the maximum quotation was \$1 per pound. The same drug journal for November, 1916, gave maximum quotations of 80 cents for the former and \$2 for the latter, although drug cultivation was encouraged during these years.

Recently Wilbert ¹ called attention to a hitherto neglected source for obtaining digitalis, namely, in the collection of the wild-growing plant which has escaped from cultivation and has now become a "weed" in various sections of the United States. Fortunately the digitalis which is now found growing wild in great abundance in California, Oregon, Washington, and to some extent in West Virginia is the Pharmacopæial variety, *Digitalis purpurea*. However, if the wild-growing American digitalis is to be of commercial im-

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^{1 &}quot;The Source and Supply of Medicines with Special Reference to the Interference Caused by the European War," Martin I. Wilbert, United States Public Health Reports, Oct. 9, 1914, pp. 2715-2718.

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portance for the manufacture of the official preparations of digitalis, its activity must be at least as great as that required by the Pharma-This question, therefore, was investigated by examining the activity of four samples of wild-growing leaves which were collected in the State of Oregon during the season of 1916 and one sample of wild-growing leaves obtained from the State of Washington during the same season. For the purpose of comparison examination was also made of cultivated digitalis leaves (Digitalis purpurea) which were grown in the State of Washington during the season of 1916. Inclusion was also made of two samples of cultivated digitalis leaves of the season of 1914 which were examined shortly after their harvest, one sample being grown in Wisconsin, the other in Tinctures were made according to the United States Pharmacopæia method from all the samples and their activity was determined physiologically by the method originally adopted by the Hygienic Laboratory, which is now the method recommended by the Pharmacopæia, namely, the one-hour frog method. The Oregon digitalis was obtained through the kindness of Mr. I. E. Gaston, a student in the medical department of the University of Oregon.

A sample of the undried Oregon leaves was submitted for identification to the writer, who submitted them to Dr. W. W. Stockberger, of the United States Department of Agriculture, and by whom they were identified as Digitalis purpurea. All of the Oregon digitalis was collected near Astoria, Oreg. Sample 1 consisted of leaves gathered from first-year plants about six weeks after the flowering time for digitalis. They were rather dark green in color, the hairs being practically free from soil. They were well dried, crushing easily when rolled between the fingers. Sample 2 consisted of leaves gathered from second-year or older plants, about six weeks after flowering time. They were light green in color, well dried and free from soil. Sample 3 consisted of leaves collected from flowering plants (second-year or older plants); while sample 4 consisted of leaves from plants which had partially dried on the stalk and were vellowish-green in color.

According to Mr. Gaston all the samples which he collected were found growing upon soil containing considerable clay. He states that they will thrive on practically any soil that will absorb moisture readily. The largest and best leaves were from plants which grew on moist ground where the plants were shaded about half the day. Too much shade seemed to prevent their proper development, while long exposure to the sun caused the leaves to turn yellowish. All of the samples were air-dried immediately after the leaves were collected, except sample 4, which was dried on the stalk for the most part. The procedure used for samples 1, 2, and 3 was as follows: The freshly gathered leaves were spread out in thin layers on floors over which the air could circulate freely, and stirred frequently, at least every

other day. They will retain their green color if dried in this way and if stirred frequently do not mold. About three weeks were required to dry them thoroughly, inasmuch as rainy weather was present during about half of the time.

Samples 5 and 6 were collected and dried by Prof. A. W. Linton, of the University of Washington College of Pharmacy. Sample 5 consisted of leaves from plants growing wild near Scattle, Wash., being collected in August while the plants were in blossom. They were air-dried, being very dry and brittle, and were tinged with vellow. Sample 6 consisted of leaves from cultivated plants of second-year growth, which were obtained from the drug garden of the College of Pharmacy, University of Washington. They were collected in November, 1916, and are the second growth of leaves for the season. The air-dried leaves were green and, like sample 5, were very brittle. Sample 7 consisted of leaves from first-year cultivated Wisconsin digitalis collected in 1914, before flowering had occurred. The dried leaves were green and were free from soil. They were supplied by Prof. Edward Kremers, of the University of Wisconsin, being raised on the university drug farm. Sample 8 consisted of leaves from first-year cultivated digitalis which was grown in Cincinnati, Ohio. It was collected in November and was supplied by Prof. John Uri Lloyd. It was yellowish green when dried. The method in which the last two samples were dried is unknown. As previously stated, these samples were all examined by the one-hour frog method. Their value by this method together with a short description of the sample will be given in the table below. The doses of the tinctures given in the table represent mils per gram of body weight.

Sample No.	Description of sample.	Lethal dose of ouabain.	Lethal dose of standard tincture digitalis.	Lethal dose of sample tincture.	Corrected lethal dose of sample tincture.
1 2 3 4 5 6 7 8	Oregon, wild, 1916	0. 00000035 .00000035 .00000045 .00000045 .00000045	0.0066 .0066 .0054 .0054 .0054	0.004 .005 .004 .003 .011 .007 .003	0.0030 .0042 .0044 .0032 .0121 .0077

Samples 1 and 2 were assayed on a lot of frogs received in October; samples 3 to 6, inclusive, were assayed on a lot of frogs received one month later. All of the samples were assayed on Rana pipiens, which were all obtained from the same dealer. Since the trogs used in the standardization of samples 7 and 8 were not standardized against outbain, no comparative figures can be computed for these samples. It may be stated, however, that the resistance of the frogs usually lies within a range of 10 per cent.

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The United States Pharmacopæia IX requires that by the above method 0.006 mil of the tincture of digitalis per gram of frog weight shall be necessary to stop the heart of the frog in one hour. From the above table it is seen that all of the samples of wild Oregon

digitalis were stronger than the pharmacopæial standard.

While this investigation has shown that of the tinctures made from wild-growing digitalis, the Oregon samples were several times stronger than that grown in Washington, we should not conclude that wild Oregon digitalis is generally more active than wild Washington digitalis. Further examination of the latter would be necessary to determine this point definitely. Inasmuch as the tincture made from cultivated Washington digitalis is weaker than the tinctures made from any of the Oregon samples, it is likely that the correct explanation of the decreased activity of Washington digitalis is to be sought in sources other than in the manner of growing.

Table 1 also shows that cultivated digitalis is not necessarily less active than wild digitalis and that individual samples may be as

active as the most active sample made from wild leaves.

What was especially surprising to the writer was to find that sample 4, which was made from leaves that had partially dried on the stalk, was the most active of the Oregon samples. As stated before, these leaves were yellowish-green in color and would ordinarily be regarded as leaves of poor quality.

Again, when we consider the samples made from wild Oregon leaves we find that the time of collection of the leaves with reference to the flowering time of the plants has little to do with their activity, since sample 1, which was collected from first-year plants, was a little more active than sample 3, which was collected from flowering plants.

The fact that all of these samples were air-dried is of especial significance, inasmuch as almost every writer on the subject of digitalis activity considers that special methods of drying are necessary to secure a good product. Newcomb 1 prefers the use of drying ovens and artificial heat maintained at 100° C. for eight-hour periods on three successive days. This method is considered by him to destroy the ferments contained in the leaves without injury to the active principles; besides, it fixes the green color which is a valuable commercial asset.

From the above investigation we may conclude that the wild digitalis which is found in the Northwestern States may be utilized as a source of supply for making the various official preparations of digitalis, and that by using ordinary methods in handling and preparing the leaves we may secure a highly active product, which compares favorably with the activity of cultivated leaves grown under more favorable conditions.

¹ "Digitalis, Its Cultivation, Collection, and Preparation"; Edwin L. Newcomb, Am. J. Pharm., 1912, v. 84, p. 201.

PREVALENCE OF DISEASE.

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring.

UNITED STATES.

CEREBROSPINAL MENINGITIS.

State Reports for January, 1917.

Place.	New cases re- ported.	Place.	New cases re- ported.
Indiana: Elkhart County. Jackson County. Marion County. Pulaski County. Whitley County. Total.	4	Virginia: Floyd County. Franklin County Lee County Louisa County Nansemond County— Suffolk. Norlok County— Portsmouth	2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Ohio: Cuyahoga County— Cleveland Hamilton County— Cincinnati Montgomery County— Dayton. Summit County— Akron. Tuscarawas County	3 1 1 2 1	Orange County Rockingham County Dayton Smyth County Tazewell County Richlands Total	1

City Reports for Week Ended Feb. 17, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Akron, Ohio. Boston, Mass Chicago, III. Detroit, Mich. Elizabeth, N. J. Hartford, Conn. Manchester, N. II. Milwankee, Wis. Newark, N. J. New Bedford, Mass. New Orleans, I.a.	2 1 2 2 2 1 5 1 1	2 2 3 1 1 1	New York, N. Y. Omaha, Nebr. Philadelphia, Pa. Pittsburgh, Pa. Providence, R. I. St. Joseph, Mo. St. Louis, Mo. St. Paul, Minn Toledo, Ohio Wheeling, W. Va.	6 4 3 1 1 1 4 1 1	

DIPHTHERIA.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 391.

ERYSIPELAS.

City Reports for Week Ended Feb. 17, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Allentown, Pa	1		Milwaukee, Wis	- 9	
Ann Arbor, Mich	1		Nashville, Tenn	1	
Baltimore, Md	3	1	Newark N I	5	
Beaver Falls, Pa	1		New York, N. Y. Niagara Falls, N. Y.		
Boston, Mass		1	Niagara Falls, N. Y	2	
Bridgeport, Conn	1	2	Omaha, Nebr	5	
Buffalo, N. Y	5	1	Passaic, N. J.	1	
Camden, N. J.			Philadelphia, Pa	17	
Canton, Ohio		1	Pittsburgh, Pa	8	
Chicago, Ill		3	Portland, Oreg		
Cincinnati, Ohio	3		Reading, Pa		
Cleveland, Ohio	5	3	Reading, Pa	4	
Columbus, Ohio		1	Sacramento, Cal	1	
Denver, Colo		1	St. Louis, Mo		
Detroit, Mich	7	2	St. Paul, Minn	4	
Erie, Pa			San Diego, Cal	2	
Fort Wayne, Ind		1	San Francisco, Cal	3	
Hartford, Conn			Superior, Wis	1	
lackson, Mich	1		Toledo, Ohio		
Kalamazoo, Mich	2		Wichita, Kans	2	1
Kansas City, Mo	4		Wilkinsburg, Pa	1	
Los Angeles, Cal	3		Williamsport, Pa	2	
Malden, Mass		1			

LEPROSY.

City Reports for Week Ended Feb. 17, 1917.

During the week ended February 17, 1917, one case of leprosy was reported in New Orleans, La., and one case in San Diego, Cal.

MALARIA.

State Reports for January, 1917.

Place.	New cases re- ported.	Place.	New cases re- ported.
Kansas:		Virginia—Continued.	
Butler County-		Loudoun County	
Augusta	1	Louisa County	
Virginia:		Lunenburg County	
Accomac County	24	Victoria	
Bloxom	2	Mecklenburg County	
Albemarle County	4	Middlesex County	
Alexandria County	2	Urbanna	
Amelia County	2 2	Nansemond County	
Amena County		Suffolk	
Apportation County	2	Nelson County	
Botetourt County		Northampton County	
Brunswick County	2	Northumberland County	1
Campbell County		Nottoway County	
Altavista	. 1	Pittsylvania County	1
Caroline County	9	Powhatan County	
Bowling Green	1	Princess Anne County	1
Charles City County	5	Prince Edward County	
Dinwiddie County	2	Prince George County	3
Elizabeth City County	2	Hopewell	
Essex County	5 2 2 2 1	Prince William County	
Tappahannoek	1	Rappahannock County	
Fairfax County	2	Rockingham County	
Franklin County	36	Scott County.	
Gloucester County	3	Southampton County	
Greenesville County	15	Spotsylvania County	
Emporia	10	Stafford County	
North Emporia	5	Surry County	
Halifax County	15	Claremont	
South Boston	15	Sussex County	10
Hanover County	8	Warwick County	1
Henrico County	3	Westmoreland County-	
Isle of Wight County	17	Colonial Beach	1
James City County	4	York County	
King and Queen County	4	Tork County	
King William County	2	Total	379
Lancaster County—		10tal	3/5
Irvington	2		

MEASLES.

California-Los Angeles.

Senior Surg. Brooks reported that during the week ended February 24, 1917, 142 cases of measles were notified in Los Angeles, Cal. One hundred and sixty-nine cases were reported during the previous week.

Illinois-Cairo.

Acting Asst. Surg. Barrows reported that during the week ended February 24, 1917, 128 cases of measles were notified in Cairo, Ill., making a total of 288 cases reported since January 1, 1917.

Texas-Hill County.

Asst. Surg. Witte, on February 26, 1917, reported the occurrence of an epidemic of measles in Hill County, Tex., beginning about December 1, 1916.

Washington-Seattle.

Surg. Lloyd reported that during the week ended February 17, 1917, 205 cases of measles, with 1 death, were notified in Scattle, Wash., making a total of 6,722 cases, with 13 deaths, reported since the beginning of the epidemic, February 15, 1916.

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 391.

PELLAGRA.

State Reports for January, 1917.

Place.	New cases reported.	Place.	New cases reported.
Kansas: Wyandotte County— Kansas City Virginia: Botetourt County Elizabeth City County— Hampton Fauquier County	1	Virginia—Continue4, Fluvanna County. Halfax County. Middlesex County. New Kent County. Powhatan County. Princess Anne County. Total	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3

City Reports for Week Ended Feb. 17, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths,
Birmingham, Ala. Charleston, S. C. Nashville, Tenn 1			Norfolk, Va Pittsburgh, Pa	·····i	1

PNEUMONIA.

City Reports for Week Ended Feb. 17, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Allentown, Pa	2		Los Angeles, Cal	14	
Ann Arbor, Mich	1		Manchester, N. H	6	(
Atlantic City, N. J	2		McKeesport, Pa	3	1 :
Baltimore, Md	22	23	Nashville, Tenn	1	
Berkeley, Cal	1	1	Newark, N. J	75	1/
Binghamton, N. Y	6	5	New Castle, Pa	1	
Braddock, Pa	2		Newport, Ky	3	
hicago, Ill.	304	161	Norristown, Pa.	1	
leveland, Ohio	59	52	Oakland, Cal:	i	
'offeyville, Kans	1	0.	Pasadena, Cal	ī	
Dayton, Ohio	5	7	Philadelphia, Pa	152	8
Detroit, Mich	8	25	Pittsburgh, Pa	42	4
Duluth, Minn	4	-0	Reading Pa	4	
Flint, Mich.	7		Reading, Pa	27	
rand Rapids, Mich	8	2	Saginaw, Mich.	2	
Iarrisburg, Pa	9	1 1	San Diego, Cal.	2	,
ackson, Mich.	2		Sandusky, Ohio	2	
ohnstown, Pa	1		San Francisco, Cal.	27	1
Folomoroo Wich	0	5	Schenectady, N. Y	6	1
Kalamazoo, Mich	10	24	Toledo, Ohio	1	
Kansas City, Mo	10	24	Wichita Vone	1	
ancaster, Pa	3	********	Wichita, Kans		
exington, Ky	1	4	York, Pa	4	
orain, Ohio	4	********			

POLIOMYELITIS (INFANTILE PARALYSIS).

State Reports for January, 1917.

Place.	New cases re- ported.	Place.	New cases re- ported.
Indiana:		Ohio-Continued.	
Boone County	1	Montgomery County	
Owen County	1	Muskingum County-	
Posey County	1	Zane-ville	
Vigo County	1	Putnam County	
Total	4	Summit County— Akron	
10tal		Wood County.	2
Iowa:		Wood County	
Ida County	1	Total	1
Jones County	1		
Polk County	1	Virginia:	
	3	Bedford County	
Total	3	Powhatan County Rockbridge County	
Ohio.		Puscall County	
Cuyahoga County-		Russell County— Honaker	
Cleveland	1	Smyth County	
Darke County	1	Wise County	
Logan County	1		
Lucas County— Toledo	1	Total	-
Meigs County—		Washington:	
Pomeroy	1	Stevens County	,

City Reports for Week Ended Feb. 17, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Chicago, Ill. Detroit, Mich Kansas City, Mo Newark, N. J.	1 1	i	Newburgh, N. Y	1 1	i

RABIES IN ANIMALS.

City Reports for Week Ended Feb. 17, 1917.

During the week ended February 17, 1917, seven cases of rabies in animals were reported in Buffalo, N. Y., and two cases were reported in St. Paul, Minn.

SCARLET FEVER.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 391.

SMALLPOX.

Connecticut.

Collaborating Epidemiologist Black reported that during the week ended February 24, 1917, 12 new cases of smallpox were notified in Connecticut. Eleven of these cases occurred at Waterbury and 1 case at Old Lyme.

Minnesota.

Collaborating Epidemiologist Bracken reported that during the week ended March 3, 1917, two new foci of smallpox infection were reported in Minnesota, cases of the disease having been notified as follows: Crow Wing County, Pequot, 3; Morrison County, Parker Township, 1.

Texas-Galveston.

Surg. Bahrenburg reported that 5 cases of smallpox were notified on March 6, and 1 case on March 8, 1917, at Galveston, Tex.

State Reports for January, 1917.

	New cases reported.		Vaccination history of cases.			
Place.		Deaths.	Number vaccinated within 7 years pre- ceding attack.	Number last vacci- nated more than 7 years preceding attack.		Vaccination history not obtained or uncertain.
Kansas:						
Barber County—						
Medicine Lodge R. F. D.	1	1		1		
Bourbon County—			**********		*********	
Fort Scott	1				1	
Butler County—						
Augusta R. F. D	9			1	8	
Chase County—				_ ^		
Elmdale R. F. D.	7			1	6	
Clark County—			1	-		**********
Englewood	1				1	
Clay County-	-					
Clay County— Morgansville R. F. D	1				1	
Vining	4				4	
Doniphan County-						
Blair R. F. D	6				6	
Denton R. F. D	3				3	
Doniphan R. F. D	4				4	
Doniphan R. F. D Severance R. F. D	7				7	**********
Trov R. F. D	8				8	
Wathena R. F. D	5				5	
Douglas County—						
Lawrence	3				3	
Ellis County-	-					
Ellis R. F. D	- 1				1	
Havs	5				5	
Walker R. F. D	i				1	

SMALLPOX-Continued.

State Reports for January, 1917-Continued.

Place.					Vaccination history of cases.			
Place.	New cases reported.		Number vaccinated within 7 years pre- ceding attack.	Number last vacci- nated more than 7 years preceding attack.	Number never suc- cessfully vaccinated.	Vaccination history not obtained or uncertain.		
Kansas-Continued.								
Greenwood County— Fall River	i							
Harper County-								
Anthony Danville R. F. D	1			1	1	*********		
Johnson County—		********			1			
Kenneth	1							
Altamont R. F. D	3				3			
Lyon County-						1		
Emporia R. F. D Marion County—	2				1			
Burns	1				1			
Cedar Point R. F. D	2				2			
Florence Montgomery County—	1	********	**********	**********	1	********		
Caney	1				1			
Morris County-	2				2			
Dunlap, R. F. D Nemaha County—	2				2	***********		
Baileyville	3				3			
Centralia R. F. D	1				1			
Rooks County— Paleo R. F. D	1				1			
Sedgwick County— Wichita								
Shawnee County—	3				3	**********		
Topeka	15			2	13			
Topeka Smith County—								
Portis R. F. D Sumner County—	5				5	*********		
Wellington R. F. D	1				1			
Washington County-	4							
Clifton R. F. D Vining	2		********	2	4	*********		
Washington R. F. D Wyandotte County—	ī				1			
Wyandotte County-								
Kansas City	3				3			
Total	122			7	111	4		
Ohio:								
Ashtabula County	10				7	3		
Belmont County	4 5				2 5	2		
Crawford County—					0			
Bucyrus	1		1					
Cuyahoga County Darke County—	40					40		
Greenville	1			-	1			
Erie County	1					1		
Franklin County— Columbus.	9				9			
Geauga County	ĩ				ĩ			
Hancock County	1					1		
Harrison County Lucas County—	1	********				1		
Toledo	26					26		
Mahoning County	15				2	13		
Miami County	9			1	8	4		
Muskingum County Seneca County Summit County	il				1			
Summit County	12	********			12			
Trumbull County Tuscarawas County	29			2	4	11		
Williams County	i					1		
Wood County	î				1			

SMALLPOX-Continued.

Miscellaneous State Reports.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths
Colorado (Jan. 1-31):			Iowa (Jan. 1-31)—Continued.		
Larimer County	1		Wapello County	1	
			Washington County	1	
ndiana (Jan. 1-31):		1	Webster County	89	
Boone County	1	********			
Clark County	13	********	Total	154	
Clay County	1			7	-
Delaware County	1 3		North Dakota (Jan. 1-31):		
Fulton County	10		Burleigh County	1	
Gibson County	11		Cass County	2	*******
Hamilton County	3		Foster County	2	
Hancock County	1		Golden Valley County	3	
	10		Grand Forks County	2	******
Jackson County Jay County	10		Grant County	5	******
Johnson County	3		Kidder County	3	*******
Lake County	i		Morton County	3	
Laporte County	î	1	Mountrail County	2	*******
Madison County	3		Sargent County	1	******
	25		Stutsman County	4	
Marion County Marshall County	1				-
Miami County	î		Total	28	
Monroe County.	î		Virginia (Jan. 1-31):		
Noble County	i		Halifax County	4	
Orange County	i		Henry County	i	
Owen County	2		Norfolk County	2	
Parke County	2		Portsmouth	ī	
Pike County	1	********	Pittsylvania County	40	
Posey County	5		Chatham	1	
Pulaski County	i		Prince Edward County	2	
Putnam County	20		Rappahannock County	ĩ	
Spencer County	8		Smyth County	5	
St. Joseph County	î		Tazewell County—		
Sullivan County	4		Pocahontas	. 4	
Tippecanoe County	4		Wythe County	i	
Tipton County	25		Wytheville	10	
Vanderburgh County	67				
Vermilion County	4		Total	72	
Vigo	232	1			
Warren County	1		Washington (Jan. 1-31):		
Warrick County	2		Columbia County—		
Wayne County	2		Dayton	1	******
White County	22		King County—	- 6	1
			Seattle	1	******
Total	508	2	Lewis County	3	******
			Toledo	2	*******
owa (Jan. 1-31):		1	Lincoln County	4	*******
Allamakee County	1		Wilbur		
Boone County	ī		Spangle	1	
Dallas County	1		Spokane	34	******
Des Moines County	1			1	*******
Greene County	3		Stevens County	î	*******
Henry County	18		Whatcom County—		******
Ida County	3		Bellingham	1	
Lee County	15		Dennignam		
Linn County	9		Total.	55	
Louisa County	2			99	******
Monona County	1		Wyoming (Jan. 1-31):		
Polk County	7		Laramie County—		
Tama County	1		Goshen	1	

SMALLPOX-Continued.

City Reports for Week Ended Feb. 17, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Ann Arbor, Mich	1		McKeesport, Pa	4	
Austin, Tex	13	2	Minneapolis, Minn	21	
Birmingham, Ala	1		New Orleans, La	5	
Butte, Mont	4		Oklahoma City, Okla	4	
airo, III	2		Omaha, Nebr	6	
'hicago, Ill	3		Portland, Oreg	5	
leveland, Ohio	7		Rockford, Ill	1	
Danville, III	7			8	
Detroit, Mich	6			5	
Duluth, Minn	4		St. Paul, Minn	6	
Elgin, III	1		Salt Lake City, Utah	3	
Evansville, Ind	2		Sandusky, Ohio	1	
Flint, Mich	1		San Francisco, Cal	6	
lalveston, Tex	3			6	
ndianapolis, Ind	7			1	
exington, Ky	1		Toledo, Ohio	1	
ittle Rock, Ark	2		Topeka, Kans	3	
fadison, Wis	1		Wichita, Kans	1	

TETANUS.

City Reports for Week Ended Feb. 17, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Baltimore, Md	1	1	New York, N. Y	1 1	

TUBERCULOSIS.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 391.

TYPHOID FEVER.

State Reports for January, 1917.

Place.	New cases reported.	Place.	New case reported.
Indiana:		Kansas:	
Allen County	14	Allen County—	
Daviess County	1	Iola R. F. D	
Dearborn County	2	Atchison County—	1
Delaware County	3	Atchison	1
Floyd County	12	Barton County—	
Gibson County	1	Claffin R. F. D	1
Hancock County		Ellinwood	
Huntington County	4	Bourbon County—	
Jay County	1	Fort Scott	
Johnson County		Brown County—	
Kosciusko County		Hiawatha	
Lake County		Horton	
Laporte County	6	Butler County-	
Marion County	7	Whitewater	
Randolph County		Chevenne County-	
Rush County		St. Francis	1
St. Joseph County	16	Cloud County—	
Union County	1 2	Concordía	
Vanderburg County		Crawford County—	
Wayne County	3	Pittsburg Dickinson County—	1
Wells County	1	Herington	
Total	130	Ford County—	
A Otal	130	Spearville R. F. D	. 1

TYPHOID FEVER-Continued.

State Reports for January, 1917-Continued.

Place.	New cases reported.	Place.	New care
ansas—Continued.		Ohio-Continued.	
		Lucas County-	1
Harper County — Harper	1	Toledo	1
Jewell County—		Mahanina Counts	
Formosa R. F. D	1	Toledo. Mahoning County.	
Vocame County	1	Meigs County-	1
Kearny County—	1	Pomeroy	
Lakin.	1	Miami County	
Montgomery County— Coffeyville		Montgomery County— Dayton	1
Dana Country	1	Dayton	1
		Muskingum County	
Hutchinson	1	Noble County	1
Hutchinson Sylvia Republic County—	2	Perry County	
Republic County—		Richland County-	
Munden R. F. D	1	Mansfield	
Rice County—		Sandusky County-	1
Sterling R. F. D	1	Fremont	
Riley County— Manhattan. Sedewick County—		Scioto County-	
Manhattan	1	Portsmouth	į
Sedgwick County—		Seneca County-	
Sedgwick County— Wichita.	1	Fostoria	
Sherman County— Goodland		Tillin	
Goodland	1	Stark County—	
Sumner County-		Canton	
Ashton R. F. D	1	Trumbull County—	
Conway Springs	1	New Philadelphia	
Wilson County-		Warren County	
Fredonia	1	Wayne County	
Wyandotte County-	- 1	Wyandot County	
Kansas City R. F. D	3		
Total	33	· Total	
10001	33	Virginia:	-
rth Dakota:		Accomac County	
Burke County	1	Tangier. Albemarle CountyAlleghany County—	
Burleigh County	1	Albemarle County	1
McHenry County	1	Alleghany County-	
McHenry County	i	Covington	
Nelson County	i	Covington	
Pembina County	i	Augusta County	
Rolette County	2	Augusta County	
2000000		Botetourt County	
Total	8	Troutville	
		Buchanan County	
io:		Buchanan County Campbell County— Lynchburg	
Ashland County-	1	Lynchburg	
Ashland	9	Caroline County	
Ashtabula Couety	7	Charlotte County	
Ashtabula County	3	Culpeper County	
Brown County.	8	Fauquier County	
Brown County Butler County—		Floyd County	
Hamilton	1	Frederick County	
Clark County	1	Cloucaster County	
Clermont County	3	Grayson County	
Clinton County	1	Fries	
Columbiana County	1	Halifax County	
Crawford County		Hanover County	
Cuyahoga County	16	Henrico County	
Defiance County—	21	Richmond	
Defiance County-		Isla of Wight County	
Defiance	1	Isle of Wight County	
Delaware County	1	King and Queen County	
Erie County—		King George County	
Sandusky	1	Las County	
Fairfield County	1	Lee CountyLoudoun County	
Fayette County	1	Loudoun County	
Franklin County	12	Mecklenburg County	
Gallia County	2	Montgomery County	
Hamilton County—	1	Norfolk County	
Cincinnati	3	Norfolk	
Hardin County Highland County Huron County	1	Northumberland County	
Highland County	2	Nottoway County	
Haron County	1	Page County—	
Jefferson County	3	Shenandoah	
Lake County	2	Pittsvlvania County	
Licking County—	-	Rappahannock County	
Newark	1	Roznoke County—	
Logan County—	- 1	Salem	
Bellefontaine	1	Russell County	

TYPHOID FEVER-Continued.

State Reports for January, 1917-Continued.

Place.	New cases reported.	Place.	New cases reported.
Virginia—Continued.		Washington-Continued.	
Sussex County	1	King County	
Richlands	i	Pierce County-	
Warren County-		Buckley	6
Front Royal	2	TacomaSkagit County—	1
Washington County	i	Mount Vernon	4
Westmoreland County	2	Whitman County-	
Colonial Beach	.1	Yakima County—	1
Norton	1	North Yakima	9
St. Paul	1	m 4-1	
Wythe County— Wytheville	1	Total	37
Wytherme		Wyoming:	
Total	76	Lincoln County	
Washington:		Fremont County	1
Clarke County-		Uinta County	i
Ridgefield	5 1		
Island County	2	Total	23

City Reports for Weck Ended Feb. 17, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Albany, N. Y	3		New Bedford, Mass	1	
Allentown, Pa	2		Newburyport, Mass	1	
Baltimore, Md	2		New Castle, Pa.	9	
Beaver Falls, Pa	5		New Orleans, La	2	1
Birmingham, Ala	4	1	New York, N. Y	38	
Boston, Mass	2		Oakland, Cal.,	9	
Buffalo, N. Y.	3	1	Philadelphia, Pa	9	
Cambridge, Mass	1		Pittsburgh, Pa	=	
Canton, Ohio.		1	Portland, Oreg	:	*******
Charleston, S. C	1	-	Providence, R. I	:	
Chicago, Ill.				1	
	2	*******	Racine, Wis	2	
Cincinnati, Ohio	2		Reading, Pa	1	
Columbus, Ohio	1		Rochester, N. Y	2	
'ovington, Ky		1	Sacramento, Cal	1	
Dayton, Ohio	2		St. Louis, Mo	1	
Denver, Colo	2	1	St. Paul, Minn	2	
Detroit, Mich	2	1	San Diego, Cal	•	
East Chicago, Ind	2		San Francisco, Cal	8	
Evansville, Ind		1	Schenectady, N. Y	7	
Everett, Mass	1		South Bend, Ind		
Flint, Mich	3	1	Springfield, Ill	1	
Galveston, Tex	1		Steubenville, Ohio	î	
Hartford, Conn	1	1	Toledo, Ohio	9	*******
ackson, Mich	3		Trenton, N. J.	2	
Kalamazoo, Mich	1	*******	Washington, D. C	2	
a Crosse, Wis.	i		Wilkes-Barre, Pa.	3	
owell, Mass	i		Wilkinsburg, Pa	1	
fanchester, N. II		1	York, Pa	1	*******
filwaukee, Wis	1	1	Zanesville, Ohio	2	********

TYPHUS FEVER.

Texas.

Senior Surg. Pierce reported that during the week ended February 24, 1917, no new case of typhus fever was notified at El Paso or Laredo, Tex.; 43,656 persons were inspected. Of this number 4,535 were disinfected for destruction of vermin, and 1,045 were vaccinated. Three sick persons were detained for observation and 61 were refused admission because of illness.

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS. State Reports for January, 1917.

	C	ases reporte	d.		Cases reported.			
State.	Diph- theria.	Measles.	Scarlet fever.	State.	Diph- theria. Measle	Measles.	Scarlet fever.	
Indiana	409 41 156 33	4, 145 933 131	490 94 251 37	OhioVirginia. Washington Wyoming	629 251 25 5	2,716 3,388 3,985 75	1, 122 163 120 10	

City Reports for Week Ended Feb. 17, 1917.

	Popula- tion as of July 1, 1916	Total deaths	Diph	theria.	Me	asles.		arlet ver.		iber- losis.
City.	(estimated by United States Census Bureau).	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Over 500,000 inhabitants:										
Baltimore, Md	589, 621	229	23	2	25		7		. 25	4.5
Boston, Mass	756, 476	287	73	5	136	1	24	1	49	25
Chicago, III.	2, 497, 722	N98	184	30	485	11	474	23	353	70
Cleveland, Ohio	674,073	102	39	2	74	1	20		. 39	4:
Detroit, Mich	571, 784	250	91	7	23	*****	186	7	27	2
Los Angeles, Cal. New York, N. Y. Philadelphia, Pa.	503, 812	153	25	1	169	******	14		73	30
Philadelphia Pa	5, 602, 841 1, 709, 518	1.775	278 96	28	389	11	167	1	349	204
Pittsburgh, Pa	579,090	225	19	1	109	5	30	1	113	77
St. Louis, Mo	757, 309	282	85	6	310		9		12	15
From 300,000 to 500,000 inhabit-	101,000	2192	30		310		34	1	48	25
ants:										1
Buffalo, N. Y	468,558	173	26	2	14		9		25	1.0
Cincinnati, Ohio	410, 476	159	15				7		26	31
Jersey City, N. J.	306, 345	1.50	6				99		12	9.1
Jersey City, N. J Milwaukee, Wis	436, 535	144	15	1			134	3	14	4
Minneapolis, Minn	363, 454		10		12	*****	19	3		1
Newark, N. J.	408, 894	156	11		29		16		26	15
New Orleans, La	371, 747		9	2	249	3				32
San Francisco, Cal	463, 516	173	34	3	441	2	32		23	19
Washington, D. C.	363, 980	147	10	3	51		4		14	19
From 200,000 to 300,000 inhabit-										
ants:	****									
Columbus, Ohio	214,878	72	9	1	140				11	7
Denver, Colo	260, 800 271, 708	68	2	*****	294	2			*****	10
Indianapolis, Ind Kansas City, Mo	297, 847	******	13	*****	123	*****		*****		*****
Portland, Oreg	295, 463	51	2		332		59	*****	12	10
Providence, R. I	254, 960	107	24	2				*****	- 6	2
Rochester, N. V	256, 417	87	3	2					10	8
Portland, Oreg. Providence, R. I. Rochester, N. Y. St. Paul, Minn.	247, 232	76	8	-			14		14	12
rom 100,000 to 200,000 inhabit-	,		- 1	*****	**				14	1.0
ants:		1	1							
Albany, N. Y	104, 199		4		4		8		10	1
Birmingham, Ala	181, 762	7.3	1	9		1	1			11
Bridgeport, Conn	121,579	57	3	1	10		92		2	8
Cambridge, Mass	112,981		12	*****	16	2	7	1	- 4	5
Danten, Ohio	106, 233		8		- 6		- 4		3	
Fall Divor Mass	127, 224	52	3		41		13		- 6	5
Fall River, Mass	128,363 104,562	55 20	3		117	5	ā		14	6
Grand Rapids, Mich	198 991	33	4	1	43		2		*****	3
Hartford Conn	128, 291 110, 900	54	3	2			119		6	1
Hartford, Conn	100, 560	31			2				5	4
Lowell, Mass	113, 245	57	11		15				5	5
Lynn, Mass	102, 425	27	3.1		3	1			4	6 2
Nashville, Tenn	117, 057	48	2		103		9		4	10
New Bedford, Mass	118, 158	32			24	2	3		4	
New Haven, Conn	149, 685		7 1	1	31	2			9	4 4
Oakland, Cal	198,604 .		3	1	45		7		8	A
Oakland, Cal Omaha, Nebr	165, 470	52	1		49 1.		14	1		6
Reading, Pa	109, 381	23	2		2 .				2	
	156, 687	63	3		53		3		4	- 9
rtichmond, va										
Richmond, Va Salt Lake City, Utah Springfield, Mass	117, 399 105, 942	28 . 36	10	1		1	24			9 2 2

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City Reports for Week Ended Feb. 17, 1917-Continued.

	Popula- tion as of July 1, 1916	Total deaths	Diph	theria.	- Mea	sles.		erlet	cul	ber- osis.
City.	(estimated by United States Census Bureau).	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
From 100,000 to 2),000 inhabit-										
ants-Continued. Tacoma, Wash	112,770	25			14		2			
Tacoma, Wash Toledo, Ohio	191,554	68	1		3		64	1	7 5	
Trenton, N. J	111,593 163,314	48 61	6 7	1	3 5		17		4	
From 50,000 to 100,000 inhabit-	100,011	0.		-				1	-	1
ants:	P* co*		10		000		5		5	
Akron, Ohio Allentown, Pa Atlantic City, N. J. Bayonne, N. J. Berkeley, Cal. Binghamton, N. Y. Brockton, Mass. Canton, Ohio. Charleston, S. C. Covington, Ky. Duluth, Minn. Elizabeth, N. J. Erie, Pa.	85, 625	19	12	1	36	*****	4	*****	3	*****
Atlantic City, N. J	63, 505 57, 660	8	1		29		2		4	
Bayonne, N. J.	69, 893		1				3		4	
Berkeley, Cal	57,653	15	2	1	12				1	
Binghamton, N. Y	53, 973 67, 449	26 16	10		16	*****	1		3 2	
Capton Obio	60, 852	18	1 5	1	1	******	5			
Charleston, S. C.	60,734	24					1			
Covington, Ky	57, 144 94, 495	15	2						1	
Duluth, Minn	94, 495		1		5		3		2	
Elizabeth, N. J	86,690 75,195	32	2	*****	11	*****	2 5		2 2 5	3
	76, 078	27	5	*****	81	*****	1		1	
Flint, Mich	76,078 54,772	17	3		4		8	1	2	
Flint, Mich. Fort Wayne, Ind Harrisburg, Pa. Hoboken, N. J.	76, 183	23	5	2			. 1		4	
Harrisburg, Pa	72,015	30	3		2		*****			
Johnstown Pa	72,015 77,214 68,529	15 24	8 2	1	1	*****	11		2 2	
Lancaster, Pa	50, 853	24	2		i				î	****
Johnstown, Pa. Lancaster, Pa. Little Rock, Ark.	57,343	23	ī		67					
Malden, Mass. Manchester, N. H.	57,343 51,155	18	4		1		. 5			
Manchester, N. H	78, 283	32	2		1		3		1	
Mobile, Ala New Britain, Conn	58, 221 53, 794	21	1		7	1		*****	*****	
Norfolk Va	89,612	.,			27		1		1	
Oklahoma City, Okla	92,943	19	1		158		5			
Passaie, N. J.	71,744	23	3						1	
Norfolk, Va Oklahoma City, Okla Passaic, N. J. Portland, Me. Rockford, Ill.	63, 867	*******	*****		10		2 2			
Sacramento, Cal	55, 185 66, 895	14 28	*****		2		2		2	
sacramento, cal. saginaw, Mich. St. Joseph, Mo. San Diego, Cal. schenectady, N. Y. Sloux City, Iowa. South Bend, Ind. Springfield, Ill.	55 642	15	2				23			
St. Joseph, Mo	85, 233 53, 330 99, 519	29	2 7				3			
San Diego, Cal	53, 330	16	4		19		1		5	
Stour City Jowa	57,078	29	1		75	*****	3	*****	4	****
Somerville, Mass.	87,039	31	9	1	4		1		2	*****
South Bend, Ind	68,948	28	1				27	2	1	
Springfield, Ill	68, 948 61, 120	25	3		3		******			
Troy, N. Y.	77, 916		6		75		10		9	
Troy, N. Y Wichita, Kans Wilkes-Barre, Pa Wilmington, Del.	70,722	28	4	1	66		4		3	
Wilmington, Del	76, 776 94, 265	50					i	1		
10fk, Fa	51,656	1	4	1			1		1	
om 25,000 to 50,000 inhabitants:	07 The			-			10		0	
Alameda, Cal	27,732 37,385	6	1		11		16		2 2	
Austin, Tox	34,814	26	2	1		3	î			
Brookline, Mass	32,730	17	1		3		1		4	
Butler, Pa	27, 632 43, 425	8	1	1					*****	*****
Butte, Mont	46, 192	28 13	2 2		25				29	
Chelsea, Mass	29, 319	14	2				3		2	
Cumberland, Md	26,074	9	2		1				1	
Danville III	32, 261	23			1				1	
Dubuque, Iowa East Chicago, Ind Fast Orange, N. J Elgin, Ill	39,873				11		1 3			
Fast Orange N I	28,743 42,458		3		6		2		3	
Elgin III	28, 203	10			64		4		0	
Everett, Mass	39, 233		3		1		.4		2	
Everett, Mass Everett, Wash	35, 486	9			127					
Fitchburg, Mass	41,781 41,863	13	1							
Haverhill Mass	48,477	13			8		1		3	
	30, 366	12	7 1		0		78		9 1	

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City Reports for Week Ended Feb. 17, 1917-Continued.

	Popula- tion as of July 1, 1916	Total deaths	Diph	theria.	Me	asles.		arlet		ber- losis.
City.	(estimated by United States Census Bureau).	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
From 25,000 to 50,000 inhabit- ants—Continued.										
Kalamazoo, Mich	48,886	22			6		4		7	
Kalamazoo, Mich Kenosha, Wis	48,886 31,576 38,676	6	1		1		5		7 2	
Knoxville, Tenn	38,676	8			28		1	*****	1	
Kenosha, Wis Knoxville, Tenn La Crosse, Wis Lexington, Ky Lima, Ohio Lincoln, Nebr Long Beach, Cal Lorain, Ohio Lynchburg, Va Madison, Wis McKeesport, Pa Medford, Mass	31,677 41,097	23			21		i	*****		
Lima, Ohio	41,097 35,384 46,515	8	1				î			
Lincoln, Nebr	46, 515	13	2		16		11			
Lorgin Ohio	27,587 36,964 32,940 30,699 47,521	12			1 3	*****	1 3	*****	1	
Lynchburg, Va	32,940	6			12		0	******	2	
Madison, Wis	30,699						11		1	
McKeesport, Pa	47,521	22	2				1			
Montelair N I	20, 201	5	*****		32				2 2	
Nashua, N. H.	27, 327	8			17		*****			*****
Medford, Mass Montelair, N. J. Nashua, N. H. Newburgh, N. Y. New Castle, Pa	27, 327 29, 603	10							1	
New Castle, Pa		*******			5		1	*****		
Newport, Ky	31,927 43,715 37,353 31,404	13	1		20				5	
Niagara Falls, N. Y	37, 353	12			3	******	*****			
Ogden, Utah	31,404	10	2		26		5			
Orange, N. J.	33,080	22	1		1		1		5	
Ogden, Utah. Orange, N. J. Pasadena, Cal. Perth Amboy, N. J. Pittsfield, Mass. Portsmouth, Va. Onince, III	46,450	23	5	*****	5	*****	····i	*****	2	****
Pittsfield Mass	41, 185 38, 629	18	1	*****			1		1	
Portsmouth, Va.	39.651	6	2		11		9			
Quincy, Ill	36,798	15			2					
Quincy, Mass	36,798 38,136 46,486	6	4		6				2	
Quincy, III. Quincy, Mass Racine, Wis. Roanoke, Va.	43, 284	12	2		55		2		1	****
San Jose, Cal. Steubenville, Ohio. Superior, Wis. Taunton, Mass. Topeka, Kans.	38 902	9	-		2		1		i	*****
Steubenville, Ohio	27,445 46,226 36,283 48,726	12	2							
Superior, Wis	46, 226	9	1		2					
Taunton, Mass	36,283	29 11	3		66	1	2			
Waltham Mass	30,570	12	2	*****	1		1			*****
Waitham, Mass. Watertown, N. Y. Wheeling, W. Va. Williamsport, Pa. Williamsport, N. C. Winston-Salem, N. C.	29,894	9			3					
Wheeling, W. Va	43, 377	18	2		2		1		1	
Williamsport, Pa	33,809	15	3		6		1			
Winston-Salem N C	29,892 31,155	26		*****	51		6		1	
Zanesville, Ohio	30,863	17					2		1	
Zanesville, Ohio rom 10,000 to 25,000 inhabitants:	1			1						
Ann Arbor, Mich	15,010	6	1		1		3			
Ann Arbor, Mich Beaver Falls, Pa Braddock, Pa	13,532	******	*****	*****	*****		1		1	****
Cairo, Ill Clinton, Mass Coffeyville, Kans Concord, N. H. Galesburg, Ill Kearny, N. J. Kokomo, Ind	21,685 15,794 13,075		1		64					
Clinton, Mass	1 13,075	7			4					
Coffeyville, Kans	17, 548 22, 669 24, 276 23, 539 20, 930		2		1					
Colechurg III	22,009	11 2	2		3		1			*****
Kearny, N. J.	23, 539	9		******					2	
Kokomo, Ind	20,930	11	7	1	8	1	1		1	
Long Branch, N. J		2			1		1			
Marinette, Wis	1 14,610 13,284 17,500 23,126	2 2 7			1		1	* ***		
Musestine Iowa	17,500	'			49	1				
Nanticoke, Pa	23, 126	5	1						2	
Kearny, N.J. Kokomo, Ind. Long Branch, N. J. Marinette, Wis. Morristown, N. J. Muscatine, Iowa. Nanticoke, Pa. Newburyport, Mass. New London, Conn. North Adams Mass	15, 243 20, 985 1 22, 019	8		1	3		1			
New London, Conn	20,985	.7		1	1	1				
North Adams, Mass	19,926	11		1	15		1		1	
Plainfield, N. J.	23,805	6					î l			
New London, Conn. North Adams, Mass. Northampton, Mass. Plainfield, N. J. Rocky Mount, N. C. Rutland, Vt. Saratoga Springs, N. Y. Steelton, Pa. Wilkinsburg, Pa. Woburn, Mass	19 067 1	6			14					
Rutland, Vt	14,831	10	2 .		18		111			
Saratoga Springs, N. Y	14,831 13,821 15,548 23,228 15,969	6							*****	
Wilkinshurg, Pa	23, 228		1		1		2		1	
Woburn, Mass	15 000	5	- 1.		- 1		- 1		- 1	1

FOREIGN.

BRAZIL.

Yellow Fever-Victoria.

Yellow fever was reported present at Victoria, Brazil, January 27, 1917. Later information shows the occurrence of 13 cases with 5 deaths from January 13 to February 5, 1917.

CUBA.

Communicable Diseases-Habana.

Communicable diseases have been notified at Habana as follows:

			Remain- ing under		Feb. 1	Remain-	
Disease.	New cases.	Deaths.	freat- ment Feb. 10, 1917.	Disease.	New cases. Deaths.	freat- ment Feb. 10, 1917.	
Diphtheria. Leprosy. Malaria Measles Paratyphoid fever	6 23 1	1	3 10 32 18 3	Scarlet fever Smallpox Typhoid fever Varicella	5 8 4	4	5 2 31 2

JAPAN.

Plague-Subsidence at Nagoya and Yokkaichi.

Information dated January 23, 1917, indicates the subsidence of plague at Nagoya and Yokkaichi, Japan, no case having been notified at Nagoya since December 24, and none at Yokkaichi later than December 16, 1916. The outbreak at Yokkaichi began early in November, and from November 12 to December 16, 1916, 32 cases with 12 fatalities were notified. The population of Yokkaichi is about 27,000.

MEXICO.

Typhus-Durango.

According to information dated February 17, 1917, typhus became epidemic at Durango during the fall of 1916, having been present throughout the year. It is believed that the infection was introduced from Zacatecas, where, during the winter of 1915–16, the disease was epidemic. During the period from November 1 to 15, 1916, the daily number of typhus deaths at Durango was estimated at 15. By

January 15, 1917, the estimated number of daily fatalities from typhus was 25. The estimated population of Durango during that period was from 45,000 to 50,000. Typhus is reported present on ranches in the vicinity of Durango, with a high rate of mortality.

PERU.

Paragonimiasis-Made Notifiable.

Paragonimiasis has been recognized since 1910 as existing in Peru. The disease is believed to have been introduced by Asiatic immigration occurring during the past 15 years. The first appearance of the infection was observed on some estates situated near the coast. Paragonimiasis has been included among the diseases made notifiable in Peru.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER. Reports Received During the Week Ended Mar. 9, 1917.1 CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India:				
Rangoon	Dec. 17-30	3	3	
Do	Dec. 31-Jan. 6	2	2	
Japan:				
Osaka	Jan. 21-25	3	2	Aug. 13, 1916-Jan. 25, 1917: Cases, 990; deaths, 641.
Java:	1			
West Java				Dec. 1-14, 1916; Cases, 4; deaths, 2,
Batavia	Dec. 1-7	1		
Philippine Islands:				
Manila	Jan. 14-20	1	1	Last previous case, Jan. 4, 1917.
Provinces				Jan. 14-20, 1917; Cases, 112;
Albay	Jan. 14-20	19	14	deaths, 90.
Capiz	do	7	6	
Cavite	do	2	2	
Iloilo	do	5	6	
Leyte		45	35	
Mindanao		21	14	
Misamis		9	8	
Negros Occidental	do	4	5	
Turkey in Asia	Dec. 15-25	3	3	July 14-Dec.25, 1916: Cases, 9,542;
Aleppo	Dec. 9-15		1	deaths, 4,897.
	Dr. A	GUE.		
	PLA	GUE.		
Brazil:	1			
Bahia	Jan. 7-13	1	1	
Bahia Cevion:	Jan. 7-13	1		
Bahia Ceylon: Colombo	1		1 2	
Bahia Ceylon: Colombo India:	Jan. 7-13 Dec. 31-Jan. 6	1	2	
Bahia	Jan. 7-13 Dec. 31-Jan. 6 Dec. 24-30	1 2	2 2	
Bahia Ceylon: Colombo India: Bassein Bombay	Jan. 7-13 Dec. 31-Jan. 6 Dec. 24-30 Jan. 7-13	1 2	2 2 8	
Bahia Ceylon: Colombo India: Bassein Bombay Madras Presidency.	Jan. 7-13	1 2 8 781	2 2 8 524	
Bahia Ceylon: Colombo India: Bassein Bombay Madras Presidency Mandalay	Jan. 7-13	1 2 8 781	2 8 524	
Bahia Ceylon: Colombo India: Bassein Bombay Madras Presidency Mandalay Prome	Jan. 7-13	1 2 8 781	2 8 524 1 23	
Bahia Ceylon: Colombo India: Bassein Bombay Madras Presidency Mandalay Prome Rangoon.	Jan. 7-13	1 2 8 781	2 8 524 1 23 15	
Bahia Ceylon: Colombo India: Bassein Bombay Madras Presidency Mandalay Prome Rangoon Do	Jan. 7-13	1 2 8 781	2 8 524 1 23 15 8	
Bahia. Ceylon: Colombo	Jan. 7-13	1 2 8 781	2 8 524 1 23 15	
Bahia Ceylon: Colombo India: Bassein Bombay Madras Presidency Mandalay Prome Rangoon Do. Toungoo	Jan. 7-13	1 2 8 781	2 8 524 1 23 15 8	Nov. 4.17 1016: Coper M. Joseph
Bahia Ceylon: Colombo India: Bassein Bombay Madras Presidency Mandalay Prome Rangoon Do Toungoo Java: East Java	Jan. 7-13	1 2 8 781	2 8 524 1 23 15 8	Nov. 4-17, 1916: Cases, 23; deaths,
Bahia Ceylon: Colombo India: Bassein Bombay Madras Presidency Mandalay Prome Rangoon Do Toungoo Java: East Java Residencies—	Jan. 7-13 Dec. 31-Jan. 6 Dec. 24-30 Jan. 7-13 do Dec. 24-30 do Dec. 17-30 Dec. 31-Jan. 6 Dec. 24-30 Dec. 24-30	1 2 8 781 16 10	2 8 524 1 23 15 8 2	23. Nov. 18-Dec. 1, 1916:
Bahia Ceylon: Colombo India: Bassein Bombay Madras Presidency Mandalay Prome Rangoon Do Toungoo Java: East Java Residencies— Samarang	Jan. 7-13	1 2 8 781 16 10	2 8 524 1 23 15 8 2	
Bahia Ceylon: Colombo India: Bassein Bombay Madras Presidency Mandalay Prome Rangoon Do Toungoo Java: East Java Residencies— Samarang, Surabaya	Jan. 7-13 Dec. 31-Jan. 6 Dec. 24-30 Jan. 7-13 do Dec. 24-30 do Dec. 17-30 Dec. 31-Jan. 6 Dec. 24-30 Dec. 24-30	1 2 8 781 16 10	2 8 524 1 23 15 8 2	23. Nov. 18-Dec. 1, 1916:

¹ From medical officers of the Public Health Service, American consuls, and other sources.

Reports Received During the Week Ended Mar. 9, 1917—Continued. SMALLPOX.

	1			1
Place.	Date.	Cases.	Deaths.	Remarks.
Brazil:				
Bahia	Jan. 7-13	1		
Rio de Janeiro	Dec. 31-Feb. 5	53	12	1
Canada:		-		
Victoria	Feb. 11-17	1		1-
Winnipeg	do	3		1
Ceylon:				
Colombo	Dec. 31-Jan. 6	1		From port.
China:				
Chungking	Dec. 24-30		1	Present.
Do	Dec. 24–30 Dec. 31–Jan. 6			Do.
Dairen	Jan. 7-20	17	1	1 case in vicinity Jan. 14-20, 1913
Fount.	Pan. 1-20	1.		1 case in vicinity sain. 14-20, 151
Egypt: Alexandria	Jan. 8-14	1	1	
France:			-	1
Marseille	Dec. 1-31		2	
Germany:	Dec. 1-31	*******		
Hamburg, district	Dec. 31-Jan. 6,	22		In 12 localities.
Canal Paitain	Dec. 31-Jan. 6	22		In 12 localities.
Great Britain:	No. 1 10			
Liverpool	Feb. 4-10	1		
Greece:	T 1 17			
Athens	Jan. 1-15		5	
India:				
Bombay	Jan. 7-13	4	4	
Karachi	do	1	********	
Madras	do	- 8	3	
Rangoom	Dec. 17-30	3		-
Do	Dec. 31-Jan. 6		1	
Japan:			1	
Kobe	Jan. 21-28	24	5	
Java:				+
East Java	Nov. 18-Dec. 1	5		
Mid Java	do	50	7	
West Java				Dec. 1-14, 1916; Cases, 36
Batavia	Dec. 1-14	13		Dec. 1-14, 1916: Cases, 36 deaths, 7.
Mexico:				
Durango	Feb. 17			Present. Also present in vi
				cinity.
Spain:				· ······
Malaga	Nov. 1-30	*******	13	
Switzerland:				
Basel	Jan. 14-20	3		
Tunisia:				
Tunis	Jan. 20-26	6	6	
	TYPHUS	FEVE	R.	
Austria-Hungary:				
Austria—				
Vienna	Dec. 24-30	1	1	
Do	Dec. 31-Jan. 6	3	-	
Egypt:				
Alexandria	Jan. 8-28	47	10	
Cairo	Sept. 17-30	7	3	
Germany:	Experience		-	
Berlin	Dec. 10-23		2	
	2	3	-	
	100 7-13			
Königsberg	Jan. 7-13			
Königsberg				
Königsberg	Jan. 7-13 Jan. 28-Feb. 3		1	
Königsberg	Jan. 28-Feb. 3			
Königsberg Great Britain: Cork Greece: Saloniki			1	
Königsberg Great Britain: Cork Greece: Saloniki	Jan. 28-Feb. 3 Dec. 12-18			
Königsberg Great Britain: Cork Greece: Saloniki ava: Mid-Java	Jan. 28-Feb. 3 Dec. 12-18 Nov. 18-Dec. 1	11		
Königsberg Great Britain: Cork. Freece: Saloniki ava: Mid-Java Samarang	Jan. 28-Feb. 3 Dec. 12-18			
Königsberg Great Britain: Cork Greece: Saloniki ava: Mid-Java. Samarang West Java	Jan. 28-Feb. 3 Dec. 12-18 Nov. 18-Dec. 1 do	11 3	6	Dec. 1-14, 1916: Cases, 29; deaths
Königsberg Great Britain: Cork :reece: Saloniki ava: Mid-Java Samarang West Java Batavia	Jan. 28-Feb. 3 Dec. 12-18 Nov. 18-Dec. 1	11		Dec. 1-14, 1916: Cases, 29; deaths 2.
Königsberg Great Britain: Cork :reece: Saloniki ava: Mid-Java Samarang West Java Batavia	Jan. 28-Feb. 3 Dec. 12-18 Nov. 18-Dec. 1 do	11 3	6	Present. Estimated death dally about 25. Presen
Königsberg Great Britain: Cork :reece: Saloniki ava: Mid-Java Samarang West Java Batavia Jexico:	Jan. 28-Feb. 3 Dec. 12-18 Nov. 18-Dec. 1 do Dec. 1-7 JanFeb	11 3 25	2	Dec. 1-14, 1916: Cases, 29; deaths 2. Present. Estimated death daily about 25. Presenthroughout year 1916.
Königsberg Great Britain: Cork Freece: Saloniki ava: Mid-Java Samarang West Java Batavia Jexico:	Jan. 28-Feb. 3 Dec. 12-18 Nov. 18-Dec. 1 do Dec. 1-7	11 3 25	2	Present. Estimated death dally about 25. Presen
Königsberg Great Britain: Cork Saloniki sva: Mid-Java Samarang West Java Batavia Mexico:	Jan. 28-Feb. 3 Dec. 12-18 Nov. 18-Dec. 1 do Dec. 1-7 JanFeb	11 3 25	2	Present. Estimated death dally about 25. Presen

Reports Received from Dec. 30, 1916, to Mar. 2, 1917.

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India:		13	12	
Bombay	Nov. 5-Dec. 23 Oct, 15-Dec. 30	10	161	Oct. 8-14, 1916; Cases, 3.
Calcutta	Nov. 5-1 ec. 16	5	202	Oct 14, 1010. Cases, 0.
Madras	Dec. 31-Jan. 6		2	
100	Nov. 26-Dec. 16	2	3	
Rangoon				June 1-July 31, 1916; Cases, 3,578
Indo-China	1	*******		deaths, 2,578.
Trovinces— Anam	June 1-30	446	367	
Do	July 1-Sept. 30	636	505	
Cambodia,	June 1-30	13	9	
Do	July 1-Sept. 30	22	18	
Cochin-China	June 1-30	137	76	
Do	July 1-Sept. 30	98 216	59 200	
Kouang-Tcheou-Wan.	do		200	
Laos	June 1-30	637	616	
Do	July 1-Sept. 30	1. 276	775	
* Tonkin	June 1-30	969	709	
Do	July 1-Sept, 30	900	400	
apan:	1 10	33		
Fukuoka	Jan. 19	9	4	
Nagasaki	Nov. 27-Dec. 3 Nov. 16-Dec. 25	23	57	Aug. 13-Dec. 25, 1916: Cases, 971
Osaka	Nov. 19-Dec. 23	20		deaths, 751.
Do	Dec. 26-Jan. 11	16	8	Jan. 6-16, 1917: Cases, 9.
Taiwan Island—	N	5	7	
Keelung	Nov. 13-Dec. 23		5	
Taihoku	do	14	3	
Yokohama	Nov. 6-Dec. 3	5	1	
Districts	do			
Java:	Oct. 14-17	5	3	
East Java	Oct. 14-17	1		Nov. 17-30, 1916: Cases, 131
West Java	Nov. 17-30	22	9	deaths, 63.
Batavia Fhilippine Islands:		_		
Manila	Oct. 29-Dec. 30	201	70	Not previously reported: Cases
Do			1	49; deaths, 2.
Provinces				Not previously reported: Cases 49; deaths, 2. Oct. 29-Dec. 9, 1916; Cases, 4,191
Albay	Oct. 29-Dec. 9	246	147	deaths, 2,030. Dec. 17-30, 1916 Cases, 282; deaths, 188. Dec 31, 1916-Jan. 13, 1917; Cases 268; deaths, 198.
Do	Dec. 17-30	20	10	Cases, 282; deaths, 188. Dec
Do	Dec. 31-Jan. 13	11	10	31, 1910-Jan. 13, 1917; Case
Antique	1 Nov. 18 95	8	7	268; deaths, 198.
Do	Dec. 31-Jan. 6	2	4	
Bataan	Oct. 29-Dec. 9	2A3	77	
Do	Dec. 17-23 Dec. 31-Jan. 6	2	3	
Do		2	i	
Batangas		1 46	18	
Bohol	Oct. 29-Dec. 9	1	10	
Do	Dec. 17-23	96	67	
Bulacan	Dec 17 9	10	6	
Do	Dec. 17-23 Oct. 29-Dec. 9 Dec. 17-23 Oct. 29-Dec. 9	61	37	
Camarines	do	45	34	
Capiz Do	Dec. 17-30		23	
Do	Dec 31-Jan 13		14	
Cavite		156	113	1
Do	Dec. 17-30	24	13	
Do		28	17	
Cebu	Dec. 24-30	12	6	
Do		4	2	
Iloilo	Oct. 29-Dec. 9	237	148	
Do	Dec. 17-30	. 37	31	
Do	Dec. 31-Jan. 13	. 33	25	
Laguna	Nov. 2-25	12	10	
Leyte	Oct. 29-Dec. 9	127	98	
Do	. Dec. 17-30	90	62	
Do	. Dec. 31-Jan. 13	73	60	
Masbate	. Dec. 17-23	8	2	1
Mindoro	. Dec. 31-Jan. 13	7	6	
Misamis	. Oct. 29-Dec. 9		79	
Do	Dec. 17-30	17	12	
Do	. Jan. 1-13	3	1	
Negros Occidental	Jan. 1-13. Oct. 29-Dec. 9. Dec. 24-30. Jan. 7-13.	910	553	į.
Do	. Dec. 24-30	11	5	1
Do	Jan. 7-13 Dec. 3-9	32	22	
Pampanga				

Reports Received from Dec. 30, 1916, to Mar. 2, 1917—Continued.

CHOLERA-Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Philippine Islands—Contd. Provinces—Continued. Pampanga. Do. Rizal. Do. Do. Samar. Do. Sorsogon. Do. Tayabas. Zambales	Dec. 17-23 Dec. 31-Jan. 6. Oct. 29-Dec. 9. Dec. 17-30 Dec. 31-Jan. 6. Nov. 5-18. Dec. 31-Jan. 6. Oct. 29-Dec. 2. Dec. 17-23. Nov. 5-18. Oct. 29-Dec. 2.	6 1 27 4 1 13 51 131	5 1 14 10 33 71 2	
Straits Settlements: Singapore	Oct. 29-Dec. 2	2	2	Cont. 20 Dec. 10 1016; Conc. 050
Turkey in Asia	Nov. 6-30 Dec. 7-12 Nov. 7	17 2 1	6 1 1	Sept. 22-Dec. 12, 1916: Cases, 258; deaths, 117.
Constantinople	Oct. 1-Nov. 17	8	1	

PLAGUE.

Joazeiro Ceylon: Colombo	Oct. 28-Dec. 30	50		deaths, 2. June 1-Nov. 6, 1916: Cases, 67; deaths, 51.
Ceylon:	Oct. 28-Dec. 30	50		
Colombo	Oct. 28-Dec. 30	50		deaths, 51.
		30	30	July 23-29, 1916: Cases, 9; deaths, 8.
Chile:	04 10			
Tocopilla	Sept. 12	1	1	
Amoy, vicinity	Nov. 19-Dec. 2			Present.
Hongkong Kansu Province—	Dec. 24-30	1	1	
Taochow	Oct. 1-24		20	Pneumonic. Reported present in other localities in Province.
Ecuador				Sept. 1-Nov. 30, 1916: Cases, 156;
Duran		1		deaths, 57.
Guayaquil			7	deaths, or.
Do			13	
Do		88	35	
Milagro			00	
Nobol			1	
Santa Rosa			1	
Egypt	Sept. 1-30			Jan. 1-Dec. 30, 1916: Cases, 1,702;
				deaths, 828.
Alexandria			3	1 case on s. s. Proton, arrived
Port Said		1		Nov. 16, 1916, from Sidi Barand
Do	Jan. 18	1	1	and Sollum.
ndia				Oct. 15-Dec. 23, 1916: Cases,
Bassein	Oct. 22-Dec. 23		5	89,512: deaths, 67,068.
Bombay	Nov. 5-Dec. 30	73	59	Oct. 8-14, 1916: Cases, 13; deaths,
Do		8	6	7. Received out of date.
Karachi	Oct. 29-Dec. 23	3	2	Original report lost on s, s,
Do	Dec. 24-39	1	1	Arabia.
Do	Dec. 31-Jan. 6	i	i	
Madras	Nov. 19-Dec. 16	6	3	Oct. 8-14, 1916: Cases, 1; deaths, 1.
Do	Dec. 30-Jan. 6	3	2	00010 11, 10101 00000, 1, 000000, 1.
Mådras Presidency	Nov. 5-Dec. 16	4,003	2,677	Oct. 8-14, 1916: Cases, 534; deaths,
Do	Dec. 31-Jan. 6	851	590	353. Sept. 17-23, 1916: Cases,
Mandalay			2	429; deaths, 280.
Moulmein	Dec. 3-9		ī	and actions, now.
Prome	Oct. 22-Dec. 23		154	
Rangoon		27	24	Oct. 1-7, 1916: Cases, 9; deaths, 9.
Toungoo			10	oct. 1-1, 1010. Cases, 5, deaths, 5.

Reports Received from Dec. 30, 1916, to Mar 2, 1917-Continued.

PLAGUE—Continued.

Place. Date.	Cases.	Deaths.	Remarks.
Indo-China.			June 1-30, 1916: Cases, 75; deaths,
Provinces—			5; July 1-Sept. 30, 1916; Cases,
Anam June 1-30	27	10	164; deaths, 98.
Do July 1-Sept. 30.	51	32	
Cambodia June 1-30	17	16	
Do July 1-Sept. 30.	33	31	
Cochin-China June 1-30	31	18	
Do July 1-Sept. 30.		19	
Kouang-Tcheou-Wan July 1-31		6	
Saigon Nov. 6-19		1	
Japan:			
Nagova Dec. 10-16	2		
Yokkaichi Nov. 12-Dec. 16		10	
	32	12	
Java:			
East Java	***		Aug. 26-Nov. 3, 1916: Cases, 63;
Djocja Residency Nov. 4-17	1	1	deaths, 62.
Kediri Residency Aug. 26-Nov. 3.	18	16	
Madioendodo.	8	. 8	
Pasoeroean Residencydo	3	3	
Samarangdodo.	5	5	
Surabaya Residency Aug. 26-Nov. 17	27	28	
Surakarta Residency Aug. 26-Nov. 3.		15	
Mid-Java-			
Samarangdodo.	1	1	
Siam:		-	
Bangkok Oct. 22-Dec. 2	5	3	
Straits Settlements:		0	
Singaporedodo.	5	5	
Cape of Good Hope State-			
Uitenhage district Oct. 31-Nov. 12	2	2	Total, Oct. 23-Nov. 12, 1916; Cases, 24; deaths, 13.

SMALLPOX.

Australia: New South Wales—				-
Coonamble	Dec. 8			
Austria-Hungary:	Dec. S	1	********	
Austria—				
Vienna.	Nov. 12-Dec. 9	8		
	Nov. 12-Dec. 9	8	1	
Hungary— Budapest	Nov. 5-Dec. 23	73		
	Nov. 5-Dec. 23	13	2	
Brazil:	M 10 D 00	-		
Bahia	Nov. 12-Dec. 23	5	********	
Rio de Janeiro	Nov. 12-Dec. 30	50	12	
Canada:		1	1	
Ontario—	* 00 11 1 10			
Sarnia	Jan. 28-Feb. 10			
Toronto	do	2	********	
China:				
Amoy	Oct. 31-Dec. 9		*******	Present. Dec. 10-16, 1916: Cases
4	Y 0 11			3.
Antung	Jan. 8-14	2	1	
Canton	Nov. 1-Dec. 20		14	-
Chungking	Oct. 28-Dec. 23	******		Present.
Dairen	Nov. 5-Dec. 30	63	8	
Do	Dec. 31-Jan. 6	5	7	_
Foochow	Oct. 29-Dec. 16	*******	********	Do.
Harbin	Nov. 6-19	2		
Hongkong	Oct. 28-Dec. 30	349	243	
Do	Dec. 31-Jan. 6	69	40	
Mukden	Dec. 9-30		********	Do.
Do	Dec. 31-Jan. 13			Do.
Nanking	Nov. 12-25			Do.
Tientsin	Dec. 17-30		1	
	Dec. 1-9	3		
Cuba:				
Casa Blanca	Jan. 12	1		Vicinity of Habana. Case land-
				ed Jan. 1, 1917, from s. s. Al- fonso XII, from Santander, Spain.

Reports Received from Dec. 30, 1916, to Mar. 2, 1917-Continued.

SMALLPOX-Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Cuba—Continued, Encrucijada.	Jan. 10	1		In Santa Clara Province. Case landed from s. s. Montevideo from Barcelona, via Las Pal- mas, Canary Islands, and Porto Rico; arrived at Habana Jan.
Guanabacoa	Jan. 9	1		8, 1917. Vicinity of Habana, Case landed
Habana	Jan. 10-20	2		from s. s. Montevideo. At Mariel quarantine station. From s. s. Montevideo.
Ecuador:				Frem s. s. Montevideo.
Guayaquil	Nov. 1-30	10	1	
Alexandria	Dec. 25-31 June 11-July 1	50	3 20	
Cairo Do	July 2-Sept. 9	59	20	
Port Said	June 11-17	. 1	1	
Do	Aug. 20-Sept. 9	2	1	
Marseille	Oct. 1-Nov. 30 Dec. 17-23	·····i	14	
Hawaii: Honolulu	Jan. 9	1		From s. s. Tenyo Maru from
Do	Jan. 24	1		oriental ports. From s. s. Ecuador from Hong-
India:				kong.
Bombay	Dec. 10-30	5	1	Oct. 8-14, 1916: Cases, 3; deaths, 3. Received out of date. Orig-
Do	Dec. 31-Jan. 6	8		3. Received out of date. Orig-
Calcutta	Nov 5-Dec. 2		2	inal report lost on s. s. Arabia.
Karachi	Dec. 31-Jan. 6 Nov. 5-Dec. 16 Dec. 31-Jan. 6	22	8	
Madras	Dec 31- Jan 6	11	5	
Do Moulmein,	Oct. 28-Nov. 4	**	4	
Rangoon	Oct. 28-Dec. 16	14	i	*
Indo-China				June 1-30, 1916: Cases, 53; deaths, 11. July 1-Sept. 30, 1916: Cases, 157; deaths, 83.
Anam	June 1-30	22	10	Cases, 157; deaths, 83.
Cambodia	July 1-Sept. 30 June 1-30	11	4	
Do	July 1-Sept. 30	14	6	
Cochin-China	June 1-30	19	5	
Do	July 1-Sept. 30	81	35	
Laos	Aug 1-Sept 30	19	16	
Tonkin	June 1-30	19	1	
Paigon	June 1-30	11 26	5 6	
Japan:		20		
Kobe	Nov. 28-Dec. 10 Jan. 1-7	i	1	
Java:				
East Java	Nov. 4-10	1		Sept. 16-Nov. 10, 1916: Cases, 77;
Surabaya	Nov. 4-10			deaths, 2. Sept. 16-Nov. 17, 1916: Cases, 111;
Samarang	Nov. 4-10	3		deaths, 11.
West Java Batavia	Sept. 29-Nov. 30	35	8	deaths, 11. Sept. 29-Nov. 30, 1916: Cases, 330; deaths, 49.
Mexico:		20		
Mexico City	Dec. 10-30	6		
Nuevo Laredo	Dec. 31-Jan. 6 Dec. 10-30	1		
Fortugal: Lisbon	Nov. 19-Dec. 2			
Portuguese East Africa: 1 ourenco Marques	Sept. 1-30		1	
Russin:				
Archangel	Nov. 25-Dec. 29	6	1	37 12 05 1016: Canea 35:
Moscow	Oct. 16-Dec. 18 Oct. 8-Nov. 25	43 95	12 31	Nov. 13-25, 1916: Cases, 35; deaths, 8.
Fetrograd Fouth Africa: Johannesburg	Nov 26-Dec. 2	15	31	deaths, or
Fnain:				
Cadiz	Nov. 1-Dec. 31		144	Jan. 1-Dec. 31., 1916: Deaths, 405.
				van. 1-Dec. or, 1910. Deaths, 100.
Madrid	Sout 1-Oct 31		9	
Malaga	Sept. 1-Oct. 31 Nov. 1-30		2 22	
Madrid	Sept. 1-Oct. 31 Nov. 1-30 Nov. 19-Dec. 23	5	22 1	

Reports Received from Dec. 30, 1916, to Mar. 2, 1917-Continued.

SMALLPOX-Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Straits Settlements:				
Penang	Oct. 28-Dec. 23	14	3	
Singapore	Nov. 19-Dec. 23	14 3	1	
	Nov. 5-11	1		
	Dec. 31-Jan. 13		********	
Tunisia:	Dec. 31-Jan. 13		********	
Tunis	Nov. 25-Dec. 15	51	97	
	Dec. 30-Jan. 19	27	27	
Turkey in Asia:	100. 00-Juli. 10	-		
Trebizond	Nov. 11-Dec. 30	1	1	
Union of South Africa:		-	-	
	Sept. 10-Nov. 28	25		
On vessel:	cept. 10 1.01. 201.			
	Jan. 22	2		Landed at Yokohama quaran-
and the post and the control of		-		tine.
. Do	Jan. 24-Feb. 3	9	3	En route to Honolulu. Vessel
				from oriental ports.

TYPHUS FEVER.

	TYPHUS PEVER.					
Argentina:	N 1 00					
Rosario Austria-Hungary: Austria—	Nov. 1-30		1			
Vienna Hungary—	Nov. 5-Dec. 23	20	1			
Budapest	do	3	1			
Belgium: Ghent			1			
Liege	do		1			
Antung	Nov. 12-18	6				
Tientsin	Oct. 29-Nov. 4	1				
Santiago	Dec. 7-13	1	1			
Alexandria	Nov. 12-Dec. 31 Jan. 1-7	28	12	Nov. 19-25, 1916; 1 case; Dec.		
Cairo	June 11-July 1	275	142	17-23, 1916: Cases, 4.		
Do	July 2-Sept. 16		133			
Port Said	June 11-17 July 2-Sept. 2	20	9			
Germany:	outy a septi a					
Berlin	Oct. 15-Dec. 9		5			
Bremen	Oct. 22-Nov. 18		2			
Frankfort-on-Main			1			
Königsberg	Nov. 12-Dec. 23		5			
Do	Dec. 31-Jan. 6		1			
Nuremberg			********			
Cork	Jan. 7-13		********			
Glasgow	Dec. 3-30 Jan. 7-13	4	·····i			
reece:						
Saloniki	Nov. 7-Dec. 11		25			
East Java				Sept 16 Nov 2 1016, Care 0		
Mid-Jaya				Sept. 16-Nov. 3, 1916; Cases, 9, Sept. 16-Nov. 10, 1916; Cases, 54;		
Samarang		7		deaths, 7.		
West Java				Sept. 29-Nov. 30, 1916; Cases, 130;		
Batavia	Sept. 29-Nov. 30	99	9	deaths, 10.		
Mexico:	P					
Aguascalientes Ciudad Juarez	Dec. 22			Epidemie. July, 1916-Feb. 5, 1917: Case		
Durango	Dec. 12			100 (estimated). Present.		
Mexico City	Dec. 3-30	835		,		
D0	Dec. 31-Jan. 6	162				
Nuevo Laredo	Dec. 10-16	4		July 1-Dec. 16, 1916: Cases, 28,		
Rotterdam	Nov. 26-Dec. 30	8				

Reports Received from Dec. 30, 1916, to Mar. 2, 1917-Continued.

TYPHUS FEVER-Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Russia: Archangel Moscow	Nov. 25-Dec. 29 Oct. 16-Nov. 25	29 55	9	
Petrograd	Oct. 8-Dec. 2	139	42	
Spain:				
Madrid	Nov. 1-Dec. 31		3	Jan. 1-Dec. 31, 1916: Deaths, 35.
Sweden:		-	1	
Stockholm	Nov. 28-Dec. 4	1		
Do	Dec. 31-Jan. 6	3		
Switzerland:				
Zurich	Dec. 3-9	1		
Do	Jan. 7-13	1		
Tunisia:				
Tunis	Dec. 16-22	1		
Turkey in Asia:				
Haifa	Oct. 16-22	1		
Trebizond	Dec. 17-30	3	3	

YELLOW FEVER.

Ecuador: Babahoyo. Chobo. Duran. Guayaquil. Do. Do.	Jan. 27	1 1 1 17 15 6	1 5 12 3	Present.	
	(Sept. 1-30 Oct. 1-31	2	1	In 1915: Cases, 2; deaths, 2. ropean and native.	Eu-